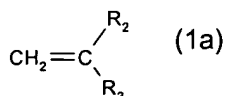


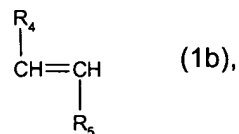
## CLAIM AMENDMENTS

Please withdrew claims 15-18 and amend the Claim 1 as follows:

1. (Currently amended) A crosslinkable or polymerizable prepolymer that is obtained by
- (a) copolymerizing at least one hydrophilic monomer having one first ethylenically unsaturated group and at least one crosslinker comprising two or more second ethylenically unsaturated groups in the presence of a chain transfer agent comprising a chain transfer group and a first reactive group to obtain a copolymerization product with first reactive groups, wherein said at least one crosslinker is a polysiloxane, a perfluoroalkyl polyether, or a polysiloxane/perfluoroalkyl polyether block copolymer, wherein the hydrophilic monomer is a monomer which, when polymerized, gives a homopolymer which is water-soluble or can absorb at least 10% by weight of water; and
- (b) reacting an organic compound with the copolymerization product to form the crosslinkable or polymerizable prepolymer having third ethylenically unsaturated groups, wherein the organic compound comprises a third ethylenically unsaturated group and a second reactive group, wherein the second reactive group of the organic compound reacts with one of the first reactive groups of the copolymerization product,
- wherein said crosslinkable or polymerizable prepolymer can be crosslinked or polymerized to form a polymeric material capable of forming a hydrogel when contacted with water.
2. (Previously presented) A prepolymer according to claim 1, wherein the hydrophilic monomer according to step (a) is a radical of formula



or



wherein R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sub>4</sub> is C<sub>1</sub>-C<sub>4</sub>-alkyl, phenyl or a radical -C(O)OY<sub>9</sub>, wherein Y<sub>9</sub> is hydrogen or unsubstituted or hydroxy-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sub>5</sub> is a radical -C(O)Y<sub>9</sub>' or -CH<sub>2</sub>-C(O)OY<sub>9</sub>' wherein Y<sub>9</sub>' independently has the meaning of Y<sub>9</sub>;  
and

R<sub>3</sub> is

- (i) a non-ionic substituent selected from the group consisting of
- a) C<sub>1</sub>-C<sub>6</sub>-alkyl which is substituted by one or more same or different substituents selected from the group consisting of -OH and -NRR', wherein R and R' are each independently of another hydrogen or unsubstituted or hydroxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl or phenyl;

- b) phenyl which is substituted by hydroxy or -NRR', wherein R and R' are as defined above;
- c) a radical -COOY, wherein Y is C<sub>1</sub>-C<sub>2</sub>-alkyl, C<sub>1</sub>-C<sub>12</sub>-alkyl which is substituted by hydroxy, -NRR', a radical -O-(CH<sub>2</sub>CH<sub>2</sub>O)<sub>1-24</sub>-E, or a radical -NH-C(O)-O-G, wherein R and R' are as defined above, wherein E is hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl, wherein -O-G is the radical of a saccharide with 1 to 8 sugar units or is a radical -O-(CH<sub>2</sub>CH<sub>2</sub>O)<sub>1-24</sub>-E;
- d) -CONY<sub>1</sub>Y<sub>2</sub>, wherein Y<sub>1</sub> and Y<sub>2</sub> are each independently hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>12</sub>-alkyl which is substituted by hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkoxy, a radical -CH(OR<sub>18</sub>)<sub>2</sub>, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>2</sub>-C<sub>5</sub>-alkanoyl, or a radical -O-(CH<sub>2</sub>CH<sub>2</sub>O)<sub>1-24</sub>-E, wherein R<sub>18</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>2</sub>-C<sub>5</sub>-alkanoyl, wherein E is as defined above, or Y<sub>1</sub> and Y<sub>2</sub> together with the adjacent N-atom form a five- or six-membered heterocyclic ring having no additional heteroatom or one additional oxygen or nitrogen atom; and
- e) a radical -OY<sub>3</sub>, wherein Y<sub>3</sub> is hydrogen, C<sub>1</sub>-C<sub>2</sub>-alkyl, acetyl, C<sub>1</sub>-C<sub>12</sub>-alkyl which is substituted by -NRR', or a radical -C(O)-C<sub>1</sub>-C<sub>2</sub>-alkyl, wherein R and R' are as defined above or together are a five- to seven-membered heterocyclic radical having at least one N-atom and being bound in each case via said nitrogen atom;
- (ii) an anionic substituent selected from the group consisting of
- f) C<sub>1</sub>-C<sub>6</sub>-alkyl which is substituted by -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub> and -COOH;
- g) phenyl which is substituted by one or more same or different substituents selected from the group consisting of -SO<sub>3</sub>H, -COOH, -OH and -CH<sub>2</sub>-SO<sub>3</sub>H;
- h) -COOH;
- i) a radical -COOY<sub>4</sub>, wherein Y<sub>4</sub> is C<sub>1</sub>-C<sub>24</sub>-alkyl which is substituted by -COOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, or a radical -NH-C(O)-O-G', wherein G' is the radical of an anionic carbohydrate;
- j) a radical -CONY<sub>5</sub>Y<sub>6</sub>, wherein Y<sub>5</sub> is C<sub>1</sub>-C<sub>24</sub>-alkyl which is substituted by -COOH, -SO<sub>3</sub>H, -OSO<sub>3</sub>H, or -OPO<sub>3</sub>H<sub>2</sub>, wherein Y<sub>6</sub> independently has the meaning of Y<sub>5</sub> or is hydrogen or C<sub>1</sub>-C<sub>12</sub>-alkyl; and
- k) -SO<sub>3</sub>H or a salt thereof;
- (iii) a cationic substituent selected from the group consisting of
- l) C<sub>1</sub>-C<sub>12</sub>-alkyl which is substituted by a radical -NRR'R''<sup>+</sup>An<sup>-</sup>, wherein R, R' and R'' are each independently of another hydrogen or unsubstituted or hydroxy-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl or phenyl, wherein An<sup>-</sup> is an anion; and
- m) a radical -C(O)OY<sub>7</sub>, wherein Y<sub>7</sub> is C<sub>1</sub>-C<sub>24</sub>-alkyl which is substituted by -NRR'R''<sup>+</sup>An<sup>-</sup> and is further unsubstituted or substituted by hydroxy, wherein R, R', R'' and An<sup>-</sup> are as defined above; or

- (iv) a zwitterionic substituent  $-R_1-Zw$ , wherein  $R_1$  is a direct bond or a carbonyl, carbonate, amide, ester, dicarboanhydride, dicarboimide, urea or urethane group, and wherein  $Zw$  is an aliphatic moiety comprising one anionic and one cationic group each.

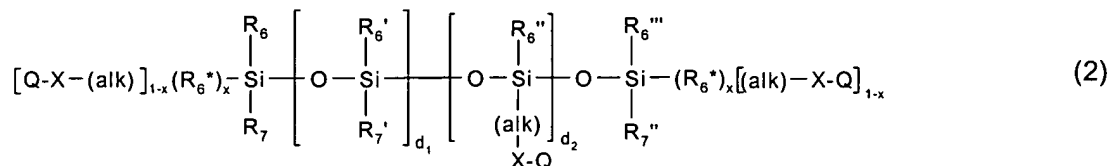
3. (previously presented) A prepolymer according to claim 1, wherein the hydrophilic monomer according to step (a) is a radical of formula



wherein  $R_2$  is hydrogen or methyl and  $R_3$  is a non-ionic substituent selected from the group consisting of  $-COO-C_1-C_2$ -alkyl,  $-COO-(CH_2)_{2-4}-OH$ ,  $-CONH_2$ ,  $-CON(CH_3)_2$ ,  $-CONH-(CH_2)_2-OH$ ,  $-CONH-(CH_2)_{1-3}-CH(OC_1-C_2\text{-alkyl})$ ,  $\begin{matrix} O \\ || \\ -C-N-C_1-C_2\text{-alkyl} \\ | \\ CH_2CH_2-OH \end{matrix}$ ,  $\begin{matrix} O \\ || \\ -C-N \\ | \\ \text{cyclohexyl ring with O} \end{matrix}$  and  $\begin{matrix} \text{cyclobutyl ring with N=O} \end{matrix}$ .

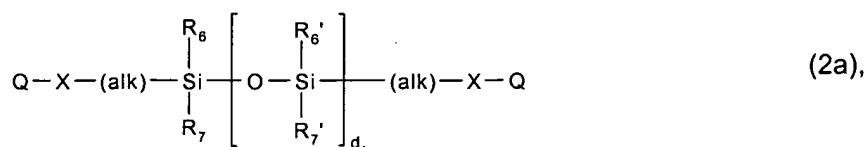
4. (canceled)

5. (Previously presented) A prepolymer according to claim 1, wherein the crosslinker according to step (a) is a polysiloxane of formula

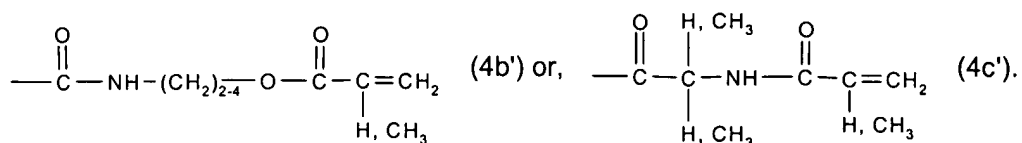
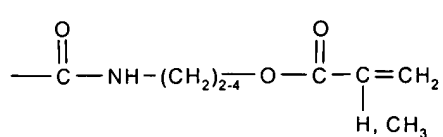
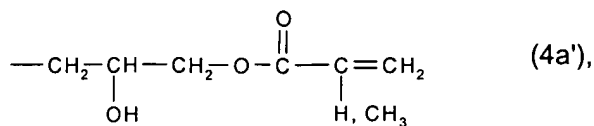
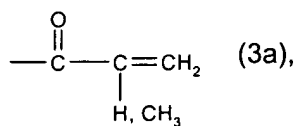


in which (alk) is alkylene having up to 20 carbon atoms which may be interrupted by  $-O-$ ;  $X$  is  $-O-$  or  $-NR_8-$ ,  $R_8$  is hydrogen or  $C_1-C_6$ -alkyl,  $Q$  is an organic radical comprising a crosslinkable or polymerizable group, 80-100% of the radicals  $R_6$ ,  $R_6'$ ,  $R_6''$ ,  $R_6'''$ ,  $R_6^*$ ,  $R_7$ ,  $R_7'$  and  $R_7''$ , independently of one another, are  $C_1-C_8$ -alkyl and 0-20% of the radicals  $R_6$ ,  $R_6'$ ,  $R_6''$ ,  $R_6'''$ ,  $R_6^*$ ,  $R_7$ ,  $R_7'$  and  $R_7''$ , independently of one another, are unsubstituted or  $C_1-C_4$  alkyl- or  $C_1-C_4$ -alkoxy-substituted phenyl, fluoro( $C_1-C_{18}$ -alkyl), cyano( $C_1-C_{12}$ -alkyl), hydroxy- $C_1-C_6$ -alkyl or amino- $C_1-C_6$ -alkyl,  $x$  is the number 0 or 1,  $d_1$  is an integer of from 5 to 700,  $d_2$  is an integer from 0 to 8 if  $x$  is 0, and is 2 to 10 if  $x$  is 1, and the sum of  $(d_1+d_2)$  is from 5 to 700.

6. (original) A prepolymer according to claim 1, wherein the crosslinker according to step (a) is a polysiloxane of formula



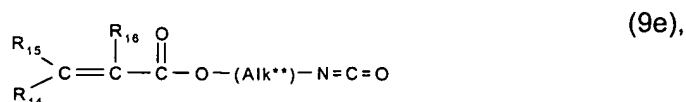
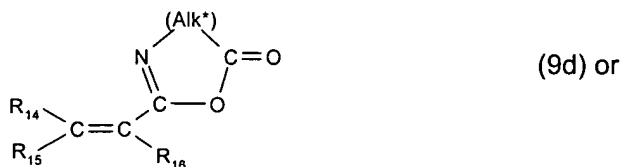
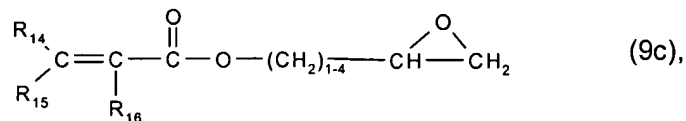
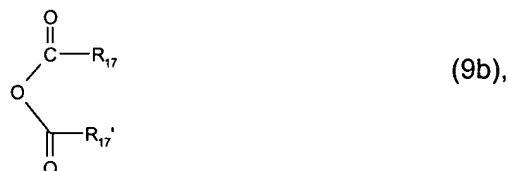
wherein  $R_6$ ,  $R_6'$ ,  $R_7$  and  $R_7'$  are each methyl,  $d_1$  is an integer from 10 to 300, (alk) is linear or branched  $C_2$ - $C_6$  alkylene or a radical  $-(CH_2)_{1-3}-O-(CH_2)_{1-3}-$ , X is -O- or -NH- and Q is a radical of the formula



7. (original) A prepolymer according to claim 1, wherein the functional chain transfer agent used in step (a) is an organic primary thiol having a hydroxy, amino, N- $C_1$ - $C_6$ -alkylamino or carboxy group.

8. (Previously presented) A prepolymer according to claim 1, wherein, the components in step (a) are used in a molar ratio of from 0.5 to 5 equivalents chain transfer agent : 1 equivalent crosslinker : 5 to 60 equivalents hydrophilic monomer(s).

9. (Previously presented) A prepolymer according to claim 1, wherein the organic compound is described by formula



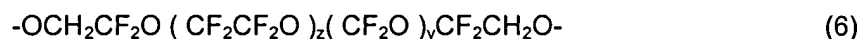
wherein  $R_{13}$  is halogen, hydroxy, unsubstituted or hydroxy-substituted  $C_1$ - $C_6$ -alkoxy or phenoxy,  $R_{14}$  and  $R_{15}$  are each, independently of the other, hydrogen,  $C_1$ - $C_4$ -alkyl, phenyl, carboxy or halogen,  $R_{16}$  is hydrogen,  $C_1$ - $C_4$ -alkyl or halogen,  $R_{17}$  and  $R_{17}'$  are each an ethylenically unsaturated radical having from 2 to 6 C-atoms, or  $R_{17}$  and  $R_{17}'$  together form a bivalent radical - $C(R_{14})=C(R_{16})$ - wherein  $R_{14}$  and  $R_{16}$  are as defined above, and (Alk\*) is  $C_1$ - $C_6$ -alkylene, and (Alk\*\*) is  $C_2$ - $C_{12}$ -alkylene.

10 – 14. (Canceled)

15. (Withdrawn) A prepolymer according to claim 1, wherein the crosslinker is a perfluoroalkyl polyether of formula



wherein  $n$  is  $\geq 1$ , each PFPE may be the same or different and is a perfluorinated polyether of formula

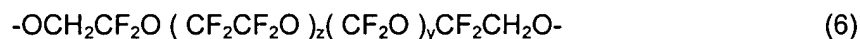


wherein the  $CF_2CF_2O$  and  $CF_2O$  units may be randomly distributed or distributed as blocks throughout the chain and wherein  $z$  and  $y$  may be the same or different such that the weight average molecular weight of the perfluoropolyether is in the range of from 500 to 4,000; wherein  $L$  is a difunctional linking group; and wherein  $Q$  is an organic radical comprising a crosslinkable or polymerizable group.

16. (Withdrawn) A prepolymer according to claim 1, wherein the crosslinker is a macromonomer of the formula (5a)



wherein  $Q$  is an organic radical comprising a crosslinkable or polymerizable group; PFPE is a perfluorinated polyether of formula (6)



wherein  $z$  and  $y$  may be the same or different such that the molecular weight of the perfluoroalkyl polyether is in the range of from 500 to 2,500.

17. (Withdrawn) A prepolymer according to claim 1, wherein the crosslinker is a polysiloxane/perfluoroalkyl polyether block copolymer of the formula

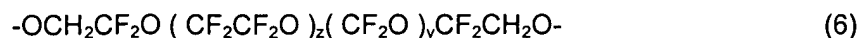


wherein

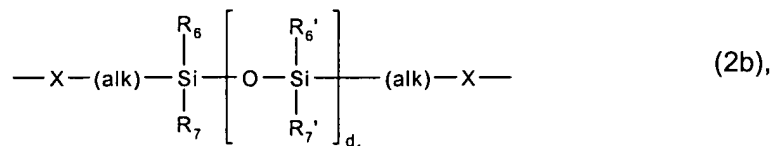
$L$  is a difunctional linking group;

$Q$  is an organic radical comprising a crosslinkable or polymerizable group;

PFPE is a perfluorinated polyether of formula (6)



in which z and y may be the same or different such that the molecular weight of the perfluoroalkyl polyether is in the range of from 500 to 2,500; and M is a radical of formula (2b)



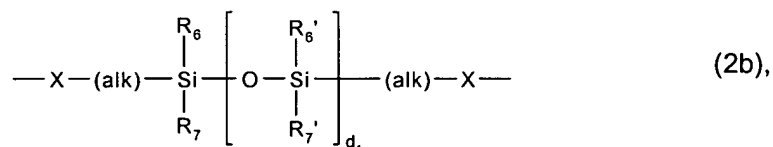
in which R<sub>6</sub>, R<sub>6</sub>', R<sub>7</sub> and R<sub>7</sub>' are each methyl, d<sub>1</sub> is an integer from 10 to 300, (alk) is linear or branched C<sub>2</sub>-C<sub>6</sub> alkylene or a radical -(CH<sub>2</sub>)<sub>1-3</sub>-O-(CH<sub>2</sub>)<sub>1-3</sub>-, X is -O- or -NH-, wherein the weight average molecular weight of the segment of formula (2b) is in the range of from 180 to 6000.

18. (Withdrawn) A prepolymer according to claim 1, wherein the crosslinker is a polysiloxane of formula (2c)



wherein

(PDMS)<sub>1</sub> and (PDMS)<sub>2</sub> are, each, independently of the other, a radical of formula (2b)



in which R<sub>6</sub>, R<sub>6</sub>', R<sub>7</sub> and R<sub>7</sub>' are each methyl, d<sub>1</sub> is an integer from 10 to 300, (alk) is linear or branched C<sub>2</sub>-C<sub>6</sub> alkylene or a radical -(CH<sub>2</sub>)<sub>1-3</sub>-O-(CH<sub>2</sub>)<sub>1-3</sub>-, X is -O- or -NH-, wherein the weight average molecular weight of the segment of formula (2b) is in the range of from 180 to 6000;

Q is an organic radical comprising a crosslinkable or polymerizable group; and

L is a difunctional linking group.